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\*\*for U. S. filing\*\*

**SELF-ADHESIVE FLEXIBLE ELEMENT AND WIG EQUIPPED WITH SAME**

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RELATED U.S. APPLICATIONS

Not applicable.

STATEMENT REGARDING FEDERALLY SPONSORED  
RESEARCH OR DEVELOPMENT

Not applicable.

REFERENCE TO MICROFICHE APPENDIX

Not applicable.

FIELD OF THE INVENTION

[0001] The invention concerns a self-adhesive flexible element that can be attached to a wig in order to facilitate its hold in the desired position on the user's head. The invention can be applied to all types of false hair (wig, fake hair, capillary enhancements), or to other hair types.

[0002] Similarly the invention applies to wigs equipped with anti slip or anti slide elements.

BACKGROUND OF THE INVENTION

[0003] It is understood that false hair, wigs etc, come equipped with an inner support that is more often than none composed of a particular type of net to which the real or artificial hair is attached. The inner support is equipped with an element that allows the wig etc to be attached to the user's head. This element varies in nature.

[0004] According to the popular mode of use, wigs include a skullcap composed of strips of elastic fabric onto which the "wefts" that support the hair, are sewn, thus forming a wig cap. These elastic

strips are similar to those commonly found in lingerie (bra straps or others); they can be quite thick, long, or even elastic (different lengths).

**[0005]** In theory, a wig should satisfy the following requirements:

- be simple and quick to position on the user's head;
- be as light as possible;
- hold sufficiently that it does not slide;
- does not move in relation to the user's skin;
- be washable and maintain its appearance and properties over time;
- offer the closest imitation to real hair;
- be easy to style; and
- facilitate simple and almost instantaneous removal.

**[0006]** On the other hand the wig should not produce injurious effects on the wearer's skin.

**[0007]** There are various wigs on the market that satisfy some of these requirements but there is none that satisfies all of them.

**[0008]** The claimant has already proposed (WO-99/44452) a wig that optimally meets the aforementioned specifications. The wig's inner support or cap is internally equipped with flexible anti slip pieces that are attached to the inside of the wig. These pieces are created using a stretchy fabric imbued with a substance that forms a thin film covering at least one side of the fabric destined to come into contact with the skin on the crown of the wearer's head. This thin film has an anti slip non slimy surface which has non stick properties even when subject to temperatures below its melting point, for example room temperature, once it has been imbued with said fabric and dried.

**[0009]** According to the illustrative example described in the aforementioned document, the thin film made of an adhesive substance imbued on the stretchy fabric and covering at least one side of it, is composed of a mixture of two adhesives from the polyurethane class of adhesives.

**[0010]** The wig displays the following characteristics as a result of being equipped with the anti slip pieces:

- can be quickly and easily positioned by the user without requiring the help of an expert;
- has a better hold on the head as compared to previous articles, and does not produce any type of uncomfortable sensation; and
- can be easily and instantly removed, without producing any disagreeable or injurious effects.

**[0011]** The wig described in document WO-99/44452 therefore represents a major improvement in relation to previously offered articles.

**[0012]** Likewise, it seems highly desirable that a new fabric be created that specifically offers:

- a softer and more comfortable feeling when placed in contact with the wearer's skin;
- more neutral or less reactive in relation to the skin; and
- accumulated adhesive qualities on the skin.

### **BRIEF SUMMARY OF THE INVENTION**

**[0013]** The invention represents a fabric that is extremely suitable for creating wigs. In addition the invention encompasses wigs that apply this type of fabric.

**[0014]** The aim of the invention is achieved by producing a wig with an inner support or cap composed, at least in part, of flexible elements that stick to the wearer's skin and are composed of flexible fabric, coated at least on one side, with a thin coating or film of polysiloxane and positioned in such a way that it comes into contact with the wearer's skin, while wearing the wig.

**[0015]** More generally, the invention is composed of a flexible self-adhesive element made of a flexible fabric, coated at least on one side, with a thin coating or film of polysiloxane which comes into contact with the skin of the wearer of a wig featuring said flexible element.

**[0016]** The invention affords the previously mentioned advantages and presents the following interesting characteristics:

- the flexible self-adhesive elements allow real or false hair to be directly implanted on to the element;
- the polysiloxane film affords an adhesive effect that increases over a short period of time, following contact with the skin; and
- the elastic properties of the flexible element are maintained over time and are not affected by frequent washing.

#### BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

**[0017]** The objectives, characteristics and advantages listed above, and more besides, will be made more obvious from the description that follows and the attached diagrams which show:

**[0018]** - Figure 1 is a diagrammatic view of the flexible self-adhesive element, based on the

**[0019]** - Figure 2 is a side diagrammatic view of the inside of the wig, equipped with the flexible self-adhesive elements.

**DETAILED DESCRIPTION OF THE INVENTION**

**[0020]** Said images are highlighted in order to provide an interesting illustrative example of, but are in no way limited to, the flexible self-adhesive element of a wig according to this invention.

**[0021]** According to the invention the flexible self-adhesive element (1), is composed of a flexible fabric (2), coated at least on one side with a thin coating or film of polysiloxane (3) applied to the support fabric by a common process known as induction.

**[0022]** The thin coating or film (3) should preferably be composed of an ET/OU single component polysiloxane, for example a solvent-free polysiloxane.

**[0023]** The support fabric (2) is conveniently composed of elastic fabric, preferably stretchable in various directions. The fabric may be a cable and weft fabric, or a non-woven fabric, meaning that the fabric (2) and its polysiloxane coating (3), both offer two-dimensional elastic properties.

**[0024]** The weight of the polysiloxane coating or film (3) coated on the fabric is between 100 and 300 g/m<sup>2</sup>.

**[0025]** According to the invention, the wig (4) is remarkable in that the inner cap (5) is composed, at least in part, of flexible self-adhesive pieces (1) as described above, whereof the inner surface is composed of a polysiloxane coating or film (3). It is positioned in such a way that it sticks to the user's crown, while he or she is wearing it.

**[0026]** When the wig comprises a skullcap or cap composed of strips of elastic fabric onto which the "wefts" supporting the hair are sewn or otherwise attached, at least some of these strips are made of flexible self-adhesive elements (1),(2), (3) as previously mentioned, onto which the natural or artificial hair is attached (6).

**[0027]** All the elastic strips onto which the "wefts" supporting the hair (6) are sewn, are conveniently composed of flexible and self-adhesive pieces (1) as previously described.

**[0028]** This procedure improves the way the wig sits, and improves its hold on the head, due to the anti slip film or coating (3) covering a larger contact area, thus interacting with a greater surface area, stretching from the wearer's forehead to his or her neck. Many contact points are strengthened and this facilitate more reliable adhesion to the user's skin or hair.

**[0029]** Based on another common procedure, the intermediary directly implants real or artificial hair (6) onto the flexible self-adhesive strips(1),(2), (3), beginning at the small end.